

SimpleLazyTeam

## Project Proposals

Members:

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### #1 Let there be color: (automatic image colorization) (Option A)

Paper: <https://dl.acm.org/citation.cfm?id=2925974>

Video demo: <https://www.youtube.com/watch?v=ys5nMO4Q0iY>

Github: [https://github.com/satoshiizuka/siggraph2016\\_colorization](https://github.com/satoshiizuka/siggraph2016_colorization)

Introduction:

A technique to automatically colorize grayscale images using convolutional neural networks. It includes a fusion layer for merging local information of image patches with global priors for the entire image.

### #2 Sequential Line Search for Efficient Visual Design Optimization by Crowds (Option A)

Paper: [http://koyama.xyz/project/sequential\\_line\\_search/download/preprint.pdf](http://koyama.xyz/project/sequential_line_search/download/preprint.pdf)

Website: [http://koyama.xyz/project/sequential\\_line\\_search/](http://koyama.xyz/project/sequential_line_search/)

Introduction:

Parameter tweaking is a common task in photo color enhancement. This paper propose a novel extension of Bayesian optimization techniques, where the system decomposes the entire parameter tweaking task into a sequence of one-dimensional line search queries that are easy for human to perform by manipulating a single slider

### # 3 Augmented Reality - Virtual Fitting Room: (Open A)

Paper: <http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=6220765>

Github: <https://github.com/akash0x53/virtual-dressing-room>

Video: <https://www.youtube.com/watch?v=RCM0u2tBI5E>

#### Introduction

To improve the user experience of shopping online, virtual fitting room gives customers a chance to “try on” clothes online. Basically, we grab images of clothes online, process those images and fit the clothes to the user using OpenCV.